

Recreational Use Attainability Analysis

Cover Sheet

Water Body Name: Rattlesnake Creek

Water Body Identification #: 520

Completed UAA Checklist:

- ☒ Pre-Field Preparatory Data Sheet
- ☒ Maps with actual survey sites marked
- ☒ Data Sheet A
- ☒ Data Sheet B – 3 of 3 pages for each site
 - Number of Sites: 6
- ☒ Data Sheet C (if applicable)
 - Number of Interviews: 0
- ☒ Photographs
 - Quantities
 - Upstream 6
 - Downstream 6
 - Other 7

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported in this UAA is true and accurate.

Signed: AC Gallardo Date: 07/20/2006
Printed Name: Carolina Gallardo Telephone #: (410) 356-8993
Organization: Tetra Tech, INC Position: Scientist

Pre-Field Preparatory Data Sheet
for Recreational Use Stream Surveys

Water Body Name: <u>Rattlesnake creek</u> (from USGS 7.5' quad)	
8-digit HUC: <u>10280101</u>	Missouri Water Body Identification (WBID) #: <u>520</u>
County: <u>LIVINGSTON</u>	
Upstream Legal Description:	
Downstream Legal Description:	
Discharger Facility Name(s): <u>Southwest Livingston R-1</u>	
Discharger Permit Number(s): <u>MO0081345</u>	
Weather Conditions for Past 7 days: <u>Hot, humid, sunny</u>	

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest.

WBID # 520

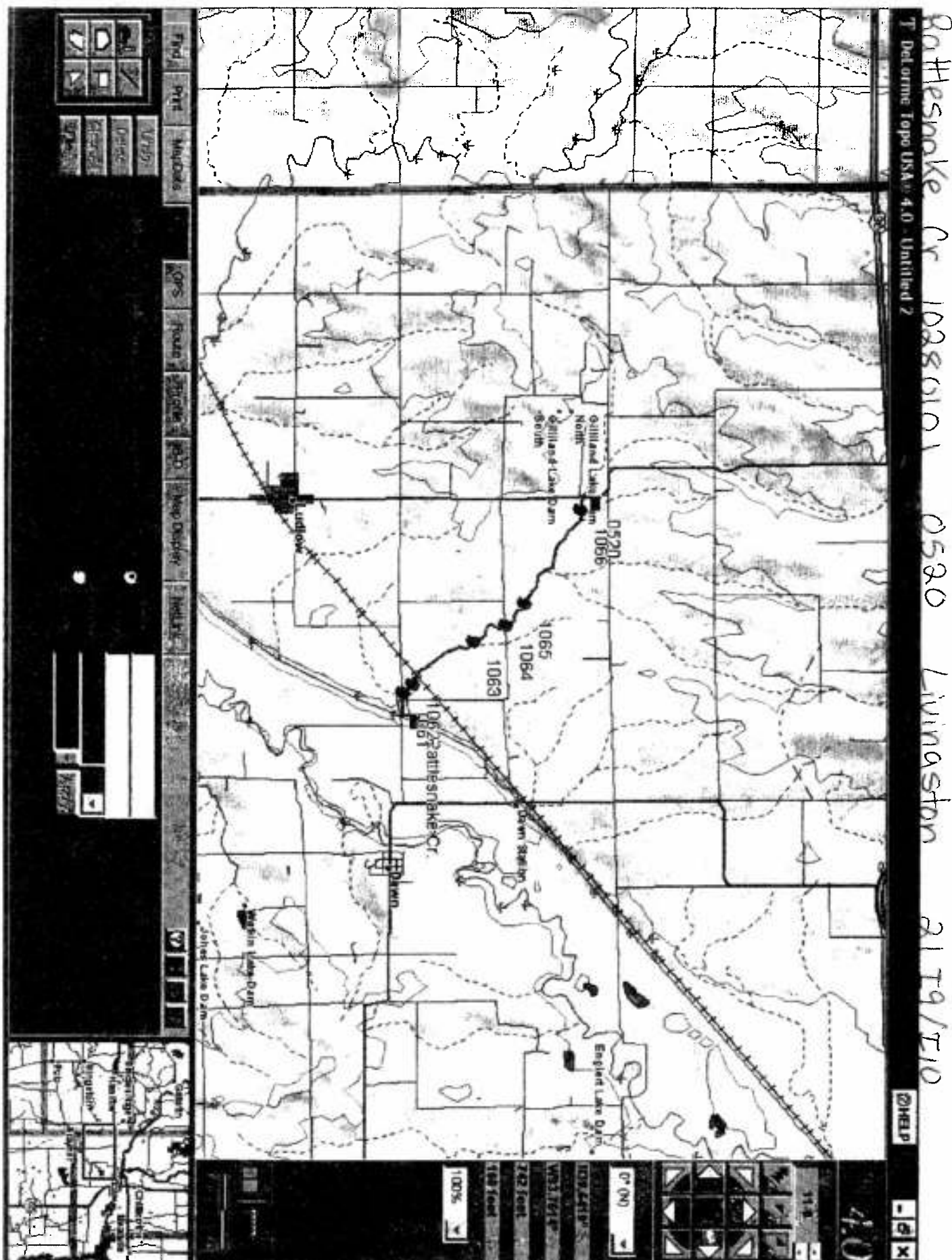
2

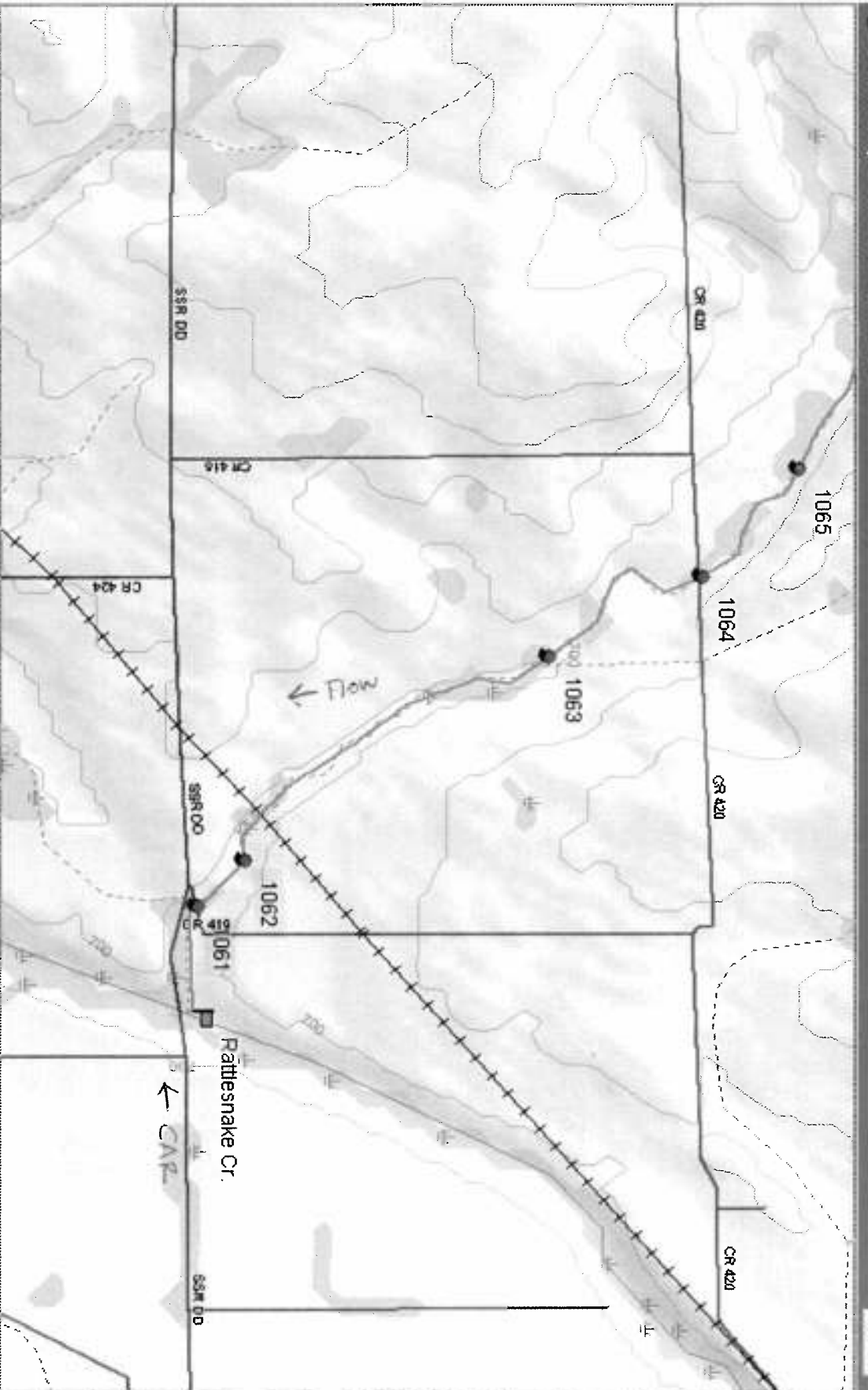
Date: 07/20/2006

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name:	Rattlesnake creek
WBID #:	520
Upstream Coordinates: (WGS 84, ddd.ddddd)	39.67020, 93.66666
Downstream Coordinates: (WGS 84, ddd.ddddd)	39.69494, 93.70293
Current Weather Conditions:	Hot, humid, sunny
Number of Sites Evaluated:	6
Name(s) of Surveyor(s):	Carolina Gallardo, Alex DeVire





Tools

Find Print MapData Draw GPS Route Profile 3-D Map Display

File...

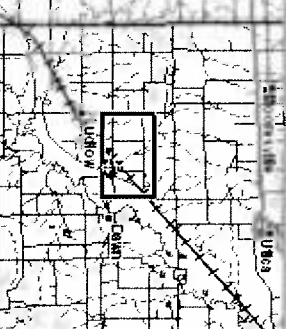
Click a Draw tool to begin drawing or measuring.

Latitude:

Longitude:

Distance:

Bearing:



Topo USA

Zoom Level: 1:10

Rotation: 0° (N)

Latitude: 43.5652°

Longitude: -91.6662°

Elevation: 702 Feet

Interval: 50 Feet

Magnify: 100%

WBID # 520 Site # 1061

3

Date: 07/20/2006**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization – 1 of 3**

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>39.67020</u>	Arrival Time:
Longitude (ddd.dddd): <u>93.66666</u>	<u>0945</u>
Photo Ids: Upstream: <u>1241</u>	Downstream: <u>1242</u>
Other: <u>1243</u>	

Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)~ 30 m from DD Hwy bridge crossing.**Surrounding Conditions*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>fields</u>	

Human Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>Run off ditch (1243)</u>				

Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)Run off ditch (1243)

QC: AD

WBID # 520 Site # 1061

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Date: 07/20/2006

Data Sheet B - Site Characterization - 2 of 3

Stream Morphology:

Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	40	1.5	10	0.12	0.25
<input checked="" type="checkbox"/> Flow	Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Velocity (ft/sec):		

Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	35	3.2	5	0.3	0.42
<input checked="" type="checkbox"/> Flow	Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Velocity (ft/sec):		

Substrate*: (These values should add up to 100%.)

% Cobble	10 % Gravel	30 % Sand	40 % Silt	20 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

N/A

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

QC: AD

WBID # 520 Site # 1062

Date: 07 / 20 / 2006

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Data Sheet B - Site Characterization – 3 of 3

Comments: Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

WBID # 520 Site # 1062

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Date: 07 / 20 / 2006

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C – Interviews

(Make additional copies as necessary for multiple interviews)

1. Do you live in the area? ☐ Yes ☐ No

If so, how long have you lived here? _____

2. Have you personally used this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often do you use it for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

3. Have you observed others using this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often have you observed it being used for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

4. Additional Comments: _____

Contact Information (if willing to provide):

Name:

Address:

Telephone #:

WBID # 520 Site # 1062

3

Date: 07/20 / 2006**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization – 1 of 3**

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>39.6711</u>	Arrival Time:
Longitude (ddd.dddd): <u>93.66746</u>	<u>1005</u>
Photo Ids: Upstream: <u>1244</u>	Downstream: <u>1245</u>
Other:	

Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)≈ 130 m from DD Hwy bridge crossing**Surrounding Conditions*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Fields</u>	

Human Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Evidence of Human Use*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)

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QC: AD

WBID # 520 Site # 1062

4

Date: 07/20/2006

Data Sheet B - Site Characterization - 2 of 3

Stream Morphology:

Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	175	3	45	0.2	0.35
<input checked="" type="checkbox"/> Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Velocity (ft/sec):			

Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	150	3.4	20	0.7	0.9
<input checked="" type="checkbox"/> Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Velocity (ft/sec):			

Substrate*: (These values should add up to 100%.)

% Cobble	10 % Gravel	70 % Sand	20 % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

N/A

Water Characteristics*: (Mark all that apply.) POOLS ONLY

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

*Segment is dry standing pools available.

QC: AD

WBID # 520 Site # 1062

Date: 07/20/2006

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Data Sheet B - Site Characterization – 3 of 3

Comments: Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

WBID # 520 Site # 1062

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Date: 07/20/2006

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C – Interviews

(Make additional copies as necessary for multiple interviews)

1. Do you live in the area? ☐ Yes ☐ No

If so, how long have you lived here? _____

2. Have you personally used this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often do you use it for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

3. Have you observed others using this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often have you observed it being used for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

4. Additional Comments: _____

Contact Information (if willing to provide):

Name:

Address:

Telephone #:

WBID # 520 Site # 1063

3

Date: 07/20/2006**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization – 1 of 3**

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>39.68338</u>	Arrival Time: <u>1045</u>
Longitude (ddd.dddd): <u>93.67870</u>	
Photo Ids: Upstream: <u>1251</u>	Downstream: <u>1252</u> Other: <u>1253</u>

Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)

CG
~130 m DS of CR 445 bridge crossing
420 7-20-2006

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Fields</u>	

Human Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Evidence of Human Use*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>Run off ditch (1253)</u>				

Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)

Run off ditch (1253)

QC: AD

WBID # 520 Site # 1063

4

Date: 07/20/2006

Data Sheet B - Site Characterization - 2 of 3

Stream Morphology:

Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	115	1.7	15	0.25	0.4
<input checked="" type="checkbox"/> Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Velocity (ft/sec):			

Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	145	1.8	15	0.1	0.2
<input checked="" type="checkbox"/> Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Velocity (ft/sec):			

Substrate*: (These values should add up to 100%.)

% Cobble	25% Gravel	70 % Sand	5 % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

40% attached algal coverage.

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

QC: AD

WBID # 520 Site # 1063

5

Date: 07/20/2006

Data Sheet B - Site Characterization – 3 of 3

Comments: Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

WBID # 520 Site # 1063

6

Date: 07/ 20/ 2006

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C – Interviews

(Make additional copies as necessary for multiple interviews)

1. Do you live in the area? ☐ Yes ☐ No

If so, how long have you lived here? _____

2. Have you personally used this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often do you use it for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

3. Have you observed others using this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often have you observed it being used for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

4. Additional Comments: _____

Contact Information (if willing to provide):

Name:

Address:

Telephone #:

WBID # 520 Site # 1064

3

Date: 07/20/2006**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization – 1 of 3**

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>39.68443</u>	Arrival Time:
Longitude (ddd.dddd): <u>93.67959</u>	<u>1026</u>
Photo Ids: Upstream: <u>1246</u>	Downstream: <u>1247</u>
Other: <u>1249, 1250</u>	

Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)

at CR 415 bridge crossing.
ca 420

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Fields</u>	

Human Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>Trash (1249, 1250)</u>				

Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)

Trash (1249, 1250)

QC: AD

WBID # 520 Site # 1064

4

Date: 07/20/2006

Data Sheet B - Site Characterization - 2 of 3

Stream Morphology:

Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	22	1.4	20	0.08	0.1
<input checked="" type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Velocity (ft/sec):					

Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	22	3.4	20	0.22	0.3
<input checked="" type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Velocity (ft/sec):					

Substrate*: (These values should add up to 100%.)

% Cobble	20 % Gravel	70 % Sand	10 % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

N/A at US pool. 40% attached algal coverage at DS pool.
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Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

QC: AD

WBID # 520 Site # 1064

5

Date: 07 / 20 / 2006

Data Sheet B - Site Characterization – 3 of 3

Comments: Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

WBID # 520 Site # 1064

6

Date: 07/20/2006

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C – Interviews

(Make additional copies as necessary for multiple interviews)

1. Do you live in the area? ☐ Yes ☐ No

If so, how long have you lived here? _____

2. Have you personally used this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often do you use it for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

3. Have you observed others using this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often have you observed it being used for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

4. Additional Comments: _____

Contact Information (if willing to provide):

Name:

Address:

Telephone #:

WBID # 520 Site # 1065

3

Date: 07/20/2006**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization – 1 of 3**
(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>39.68541</u>		Arrival Time:
Longitude (ddd.dddd): <u>93.68014</u>		<u>1055</u>
Photo Ids: Upstream:	Downstream:	Other:
<u>1254</u>	<u>1255</u>	<u>1256, 1257</u>

Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)

~130 m US of CR 415 bridge crossing.
CG 420 7-20-2006

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes <u>1257</u>	<input checked="" type="checkbox"/> Other: <u>Fields</u>	

Human Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Evidence of Human Use*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>Trash (1256)</u>				

Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)

Trash (1256)

QC: AD

WBID # 520 Site # 1065

4

Date: 07/20/2006

Data Sheet B - Site Characterization – 2 of 3

Stream Morphology:

Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	160	1.6	30	0.3	0.4
<input checked="" type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Velocity (ft/sec):					

Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	115	1.8	15	0.3	0.44
<input checked="" type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Velocity (ft/sec):					

Substrate*: (These values should add up to 100%.)

% Cobble	15 % Gravel	60 % Sand	5 % Silt	20 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

10% Algal coverage.

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

QC: AD

WBID # 520 Site # 1065

5

Date: 07/20/2006

Data Sheet B - Site Characterization – 3 of 3

Comments: Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

WBID # 520 Site # 1065

6

Date: 07/20/2006

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C – Interviews

(Make additional copies as necessary for multiple interviews)

1. Do you live in the area? ☐ Yes ☐ No

If so, how long have you lived here? _____

2. Have you personally used this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often do you use it for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

3. Have you observed others using this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often have you observed it being used for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

4. Additional Comments: _____

Contact Information (if willing to provide):

Name:

Address:

Telephone #:

WBID # 520 Site # 1066

3

Date: 07/20/2006**Field Data Sheets for Recreational Use Stream Surveys****Data Sheet B - Site Characterization – 1 of 3**

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>39.69494</u>	Arrival Time:
Longitude (ddd.dddd): <u>93.70293</u>	<u>1123</u>
Photo Ids: Upstream: <u>1261</u>	Downstream: <u>1260</u>
Other: <u>1262</u>	

Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)

<u>at HWY D bridge crossing</u>

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Fields</u>	

Human Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>Trash (1262)</u>				

Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)

<u>Trash (1262)</u>

QC: AD

WBID # 520 Site # 1066

4

Date: 07/20/2006

Data Sheet B - Site Characterization – 2 of 3

Stream Morphology:

Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	10	3.1	8	0.44	0.55
<input checked="" type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Velocity (ft/sec):					

Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool	27	2.4	25	0.1	0.15
<input type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec):					

Substrate*: (These values should add up to 100%.)

10 % Cobble	10 % Gravel	40 % Sand	10 % Silt	30 % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)

20% algal coverage.

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

QC: AD

WBID # 520 Site # 1066

5

Date: 07 / 20 / 2006

Data Sheet B - Site Characterization – 3 of 3

Comments: Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

WBID # 520 Site # 1066

6

Date: 07 / 20 / 2006

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet C – Interviews

(Make additional copies as necessary for multiple interviews)

1. Do you live in the area? ☐ Yes ☐ No

If so, how long have you lived here? _____

2. Have you personally used this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often do you use it for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

3. Have you observed others using this water body for recreation since 1975? ☐ Yes ☐ No

If so, please check ALL that apply:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input type="checkbox"/> Other:

How often have you observed it being used for recreation?

G More than 5 times per year

G 1 – 5 times per year

G Less than 1 time per year – please describe: _____

4. Additional Comments: _____

Contact Information (if willing to provide):

Name:

Address:

Telephone #:

WBID# 0520



Site# 1061 Photo ID# 1241, Upstream



Site# 1061 Photo ID# 1242, Downstream



Site# 1061 Photo ID# 1243, Ditch



Site# 1062 Photo ID# 1244, Upstream

WBID# 0520



Site# 1062 Photo ID# 1245, Downstream



Site# 1063 Photo ID# 1251, Upstream



Site# 1063 Photo ID# 1252, Downstream



Site# 1063 Photo ID# 1253, Ditch

WBID# 0520



Site# 1064 Photo ID# 1246, Upstream



Site# 1064 Photo ID# 1247, Downstream



Site# 1064 Photo ID# 1249, Trash



Site# 1064 Photo ID1250, Trash

WBID# 0520



Site# 1065 Photo ID# 1254, Upstream



Site# 1065 Photo ID# 1255, Downstream



Site# 1065 Photo ID# 1256, Trash



Site# 1065 Photo ID1257, Trash

WBID# 0520



Site# 1066 Photo ID# 1261, Upstream



Site# 1066 Photo ID# 1260, Downstream



Site# 1066 Photo ID# 1262, Trash